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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,282	03/07/2000	Jacques Belissent	SUN1P602	9227
22434	7590	09/21/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP				DELGADO, MICHAEL A
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				2144

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/521,282	BELISSENT ET AL.	
	Examiner Michael S. A. Delgado	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 June 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3 and 5-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3 and 5-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-17-2004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/17/2004 have been fully considered but they are not persuasive. In response to the argument that a "virtual domain node" is not taught by prior art. In applicant's disclosure at page 4, lines 9-14, an example of a virtual domain was disclosed. A virtual domain "ABC.com" was mapped to a real domain "mailhost.isp.net". The notion of being virtual is accomplished by "ABC.com" being an alias for the real domain mailhost.isp.net". This is accomplished by a translation function that translates between the "ABC.com" and "mailhost.isp.net" and thus gives the feeling that the "ABC.com" is a physical entity. This is consistent with the prior art function, in which an alias domain "telephone#@domain_name" is translated to a real domain "attmail.com" (Col 3, lines 25-50), (Col 4, lines 1-15), (Col 4, lines 45-50).

In response to the argument that "the associating a plurality of virtual domain attributes to the virtual domain node" is not taught by prior art. In the prior art, a Personal Identification Number (PIN) is associated with a registration process in which user information (telephone number, email address, new or old number -attributes) is register with a translation server (Col 5, lines 40-60) (Col 7, lines 15-30). The translation server uses, the derived PIN and its associated user information in implementing the translation (mapping from "virtual phone domain" to email domain), security and billing functions (Col 6, lines 20-65).

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 5-26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 5, 987,508 by Agraaharam et al.

In claim 1 Agraaharam teaches about a method for defining a virtual domain in an electronic messaging system, comprising (Fig 2):

defining a virtual domain node “recipient alias telephone number email address .. telephone#@domain_name” corresponding to a real domain name server “actual e-mail address” in a hierarchically organized directory wherein the hierarchically organized directory is a hierarchical structure that resembles a tree with one major branch at the top and many branches and sub-branches below (Col 3, lines 25-50), (Col 4, lines 1-15), (Col 4, lines 45-50); and (The directory structure of a domain is inherently one of hierarch which has a tree structure).

associating a plurality of virtual domain attributes “PINs” to the virtual domain node (Col 7, lines 15-30).

For claim 2, Agraaharam teaches about a method as recited in claim 1, wherein the plurality of virtual domain attributes include a designated virtual domain administrator “Interactive Voice Reponses System- IVR” (Col 6, lines 40-50), a designated virtual domain postmaster (Col 4, lines 40-50) (email address is translated and mail is delivered), a state of the

virtual domain (Col 6, lines 60-67), and a set of allowed services for the virtual domain (email and directory assistance) (Col 3, lines 25-50), (Col 6, lines 5-10). It is well known in the art that each email account has to have an associated administrator, postmaster and the status of the account.

In claim 3, Agrapharam teaches about a method as recited in claim 2, wherein the state of the virtual domain node is selected from the list comprising: active, inactive (or suspended), and deleted (Col 4, lines 35-65) (Col 6, lines 60-67). (Flags are used to show inactivity and availability). Delete is equivalent to an unregistered user as the action taken is the same in both cases.

In claim 5, Agrapharam teaches about a method as recited in claim 1, wherein the tree based hierarchy is a standard based directory information tree (DIT) “LDAP” that includes a plurality of directory entries each of which is associated with a higher level (parent) directory entry (Col 4, lines 1-15). (The directory structure of a domain is inherently one of a hierarchy, which has a tree structure therefore the structure of the LDAP inherently has to be a tree-like structure).

In claim 6, Agrapharam teaches about a method as recited in claim 5, wherein the directory takes the form of a segmented name space “steveg@aftmail.com” (Col 3, lines 25-50). (This is consistent with the form that is use in domain addressing)

In claim 7, Agrapharam teaches about a method as recited in claim 6, wherein the segmented name space “steveg@aftmail.com” includes a segmented name associated with a user “steveg” that is segmented in such a way that the user is uniquely identified by a unique user name at a first hierarchical level and an associated domain name “aftmail.com” at a higher

hierarchical level (Col 3, lines 25-50). (This is consistent with the form that is use in domain addressing)

For claim 8, Agraaharam teaches about a method as recited in claim 7, wherein during a user name search operation, the user name is initially resolved at the higher hierarchical level and subsequently at the first hierarchical level such that in a multi-domain environment the search operation is performed as if the user name was part of a flat name space (Col 3, lines 50-65).

In claim 9, Agraaharam teaches about a method as recited in claim 8 further comprising: defining a routing table based upon the segmented name space “steveg@aftmail.com” , wherein the routing table is used by a transfer agent “translation server” to direct an appropriately addressed email message to a receiving user in the virtual domain (Col 3, lines 50-67).

For claim 10, Agraaharam teaches about a method as recited in claim 9, wherein the segmented name space is based upon the most direct path from the user name to the highest connected hierarchical level in the directory (Col 5, lines 20-35). The most direct path includes phone number and the name of the person.

In claim 11, Agraaharam teaches about a method as recited in claim 1, wherein the electronic messaging system is an email messaging system (Col 3, lines 10-20).

For claim 12, Reid teaches about a method as recited in claim 1, wherein the electronic messaging system is a voicemail messaging system (Col 4, lines 12-25).

In claim 13, Agraaharam teaches about a method as recited in claim 10, wherein the standard based directory is an LDAP based directory (Col 4, lines 1-10).

For claim 14, Agraharam teaches about a computer-readable medium containing programming instructions for defining a virtual domain in an electronic messaging system, the computer-readable medium comprising computer program code devices configured to cause a computer to execute the operations of (Fig 2):

defining a virtual domain node “recipient alias telephone number email address .. telephone#@domain_name” corresponding to a real (non-virtual) “actual e-mail address” domain in a hierarchically organized directory wherein the hierarchically organized directory is a hierarchical structure that resembles a tree with one major branch at the top and many branches and sub-branches below (Col 3, lines 25-50), (Col 4, lines 1-15), (Col 4, lines 45-50); (The directory structure of a domain is inherently one of hierarch which has a tree structure) and associating a plurality of virtual domain attributes “PINs” to the virtual domain node (Col 7, lines 15-30).

In claim 15, Agraharam teaches about a computer-readable medium containing programming instructions for defining a virtual domain in an electronic messaging system as recited in claim 10 (Col 5, lines 20-35), wherein the plurality of virtual domain attributes include a designated virtual domain administrator “Interactive Voice Reponses System- IVR” (Col 6, lines 40-50), a designated virtual domain postmaster (Col 4, lines 40-50) (email address is translated and mail is delivered), a state of the virtual domain (Col 6, lines 60-67), and a set of allowed services for the virtual domain (email and directory assistance) (Col 3, lines 25-50), (Col 6, lines 5-10) and wherein the state of the virtual domain node is selected from the list comprising: active, inactive (or suspended), and deleted (Flags are used to show inactivity and

availability). Delete is equivalent to an unregistered user as the action taken is the same in both cases.

For claim 16, Agraharam teaches about a computer-readable medium containing programming instructions for defining a virtual domain in an electronic messaging system as recited in claim 15, the computer-readable medium further comprising computer program code devices configured to cause a computer to execute the operations of (Col 1, lines 40-60):

defining a routing table based upon the segmented name space “steveg@aftmail.com” , wherein the routing table is used by a transfer agent “translation server” to direct an appropriately addressed email message to a receiving user in the virtual domain (Col 3, lines 50-67).

In claim 17, Agraharam teaches about a computer-readable medium containing programming instructions for defining a virtual domain in an electronic messaging system as recited in claim 16, the computer-readable medium further comprising computer program code devices configured to cause a computer to execute the operations of (Col 1, lines 40-60):

initially resolving a user name during a user name search operation at the higher hierarchical level and subsequently at the first hierarchical level such that in a multi-domain environment the search operation is performed as if the user name was part of a flat name space (Col 3, lines 50-65).

For claim 18, Agraharam teaches about an electronic messaging system having a main host computer for transferring an incoming message between a sending subscriber and a receiving subscriber having an associated unique user name, comprising (Col 3, lines 50-67):

a messaging server “translation server” coupled to the host computer arranged to receive the incoming message from the sending subscriber and arranged to forward the message to the receiving subscriber based upon the receiving subscriber's user name (Col 3, lines 50-67);
a hierarchically organized directory coupled to the messaging server arranged to define a virtual domain node “recipient alias telephone number email address .. telephone#@domain_name” corresponding to a real (non-virtual) “actual e-mail address” domain having associated with it a plurality of virtual domain attributes (see claim 2 for detail) to the virtual domain node wherein the hierarchically organized directory is a hierarchical structure that resembles a tree with one major branch at the top and many branches and sub-branches below (Col 3, lines 25-50), (Col 4, lines 1-15), (Col 4, lines 45-50) (The directory structure of a domain is inherently one of hierarch which has a tree structure);

In claim 19, Agraharam teaches about an electronic messaging system as recited in claim 18, wherein the plurality of virtual domain attributes include a designated virtual domain administrator “Interactive Voice Reponses System- IVR” (Col 6, lines 40-50), a designated virtual domain postmaster (Col 4, lines 40-50) (email address is translated and mail is delivered), a state of the virtual domain(Col 6, lines 60-67) and a set of allowed services for the virtual domain (email and directory assistance) (Col 3, lines 25-50), (Col 6, lines 5-10). It is well known in the art that each email account has to have an associated administrator, postmaster and the status of the account.

For claim 20, Agraharam teaches about an electronic messaging system as recited in claim 19, wherein the state of the virtual domain node is selected from the list comprising: active, inactive (or suspended), and deleted (Col 4, lines 35-65), (Col 6 lines 60-67) (Flags are

used to show inactivity and availability). Delete is equivalent to an unregistered user as the action taken is the same in both cases.

In claim 21, Agraharam teaches about an electronic messaging system as recited in claim 20, wherein the hierarchically organized directory is an LDAP based directory information tree (DIT) that includes a plurality of directory entries each of which is associated with a higher level (parent) directory entry and wherein the directory takes the form of a segmented name space (Col 4, lines 1-15). (The directory structure of a domain is inherently one of a hierarchy, which has a tree structure therefore the structure of the LDAP inherently has to be a tree-like structure).

For claim 22, Agraharam teaches about an electronic messaging system as recited in claim 21, wherein the user name “steveg@aftmail.com” is segmented in such a way that the user is uniquely identified by a unique userid “steveg” at a first hierarchical level and an associated domain name “aftmail.com” at a higher hierarchical level (Col 3, lines 25-50).

In claim 23, Agraharam teaches about an electronic messaging system as recited in claim 22, wherein in order for the messaging server to forward the email message to the receiving subscriber, the messaging server executes a user name search operation (Col 3, lines 50-65).

In claim 24, Agraharam teaches about an electronic messaging system as recited in claim 23, wherein the user name search operation comprises:

initially resolving the user name at a highest hierarchical level and subsequently at a lowest hierarchical level in such a way that when the name search operation is executed in a multi-domain environment, the search operation is performed as if the user name was part of a flat name space (Col 3, lines 50-65).

In claim 25, Agraharam teaches about an electronic messaging system as recited in claim 24, wherein the messaging server further includes:

a routing table defined by the directory based upon the resolved receiving subscriber's user name that defines a path by which the email message is passed from the sending subscriber to the receiving subscriber (Col 3, line 50-Col 4, line 15); and

a transfer agent "translation server" arranged to direct the email message from the sending subscriber to the receiving subscriber as defined by the routing table (Col 3, lines 50-67).

In claim 26 Agraharam teaches about a method for defining a virtual domain in an electronic messaging system, comprising (Fig 2):

defining a virtual domain node "recipient alias telephone number email address .. telephone#@domain_name" corresponding to a real domain name server "actual e-mail address" in a hierarchically organized directory wherein the hierarchically organized directory is a hierarchical structure that resembles a tree with one major branch at the top and many branches and sub-branches below (Col 3, lines 25-50), (Col 4, lines 1-15), (Col 4, lines 45-50); and (The directory structure of a domain is inherently one of hierarch which has a tree structure).

associating a plurality of virtual domain attributes to the virtual domain node such that a virtual domain in an electronic messaging system is defined "Interactive Voice Responses System- IVR" (Col 6, lines 40-50), (Col 4, lines 40-50) (postmaster- email address is translated and mail is delivered), (Col 6, lines 60-67). It is well known in the art that each email account has to have an associated administrator, postmaster and the status of the account.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,434,600 by Waite et al teaches about a method and system for securely delivering electronic mail to host having dynamic address.

US Patent No. 5,930,474 by Dunwooth et al teaches about an internet organizer for accessing geographically and topically based information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM A CUCHLINSKI JR can be reached on (571) 272-3925

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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